R-SSPO/1

rf 1 ctg.000390F.g65781.t1

MW: 321850

(Datki et al., 2023)

MGSIPNLFRFILTVIIVISSNQALLRADEVEHSEEHFCDKVEKNNDVCPTPSKFDILSEIDKEDKEWKIDFEQFKKEKITS
SSELKNEISSRFNRGKQCPFKRVVKKCCDGFKGPRCNQPEKVENVKPNNETMIPHHKLPFATCVLWGKDHFRTFSG
TFFQFNGNCEYKLSGSSSWQVNVVNDACHDWDTCTKTLKMTFGSIELTAVGKRVTIDNVKLQDHENLHKDGVIIE
RKGDYTYLKFSDGVRLKWSSDSFNIFVTVDEQYMNKVSGLCGDYNNNLNNDLLLPDDSYTNEPSIFGNSWRLDSSC
NEAAPSNNPCNTPALEEEARDACFLIDNPSDSFRLCRKVVNASRYLEQCKKDHCSASKSIKDPERSKRLALCNSFAA
MAAECSENFVNTEWRKANRCPKTCPGEKVYTECATSCPKTCQNKHQNFAGTECKQECSPGCVCRDGFYLDAGHN
NTCVKAEDCTCSFRGNFYSTGQKVAVECNECVCNGGKWTCTDRKCPRTCSVIGMGHYRTFDGKHYDFKGNCEYTL
VEQIDESINPKLYISHRINHALLKDGPTELIIKSMKTIVSLKQNIIYINSQLVSQLPYGNSDVLVRKASDFFFTVEGKGFKV
LFDGVRIYITLDPFFVDNVRGLCGTYNFKSADDFFPPSGFIESDVVSFVDSYKVDGYCLTNNQNQPCENYIAAEAEAS
RLCNTLRDHNVFKNCESVVDVASFIEACKYDLCSDGNQLHRDLFRCRAIAAYAHECAAKGIVIDWLDHDDLREIKSA
CYHSNYGKCYGGSTYSECSRSFNTTCRDLSSKNREKFSNQNINYCVAGCTCPENQYFENINGNLQCVAKESCSCYD
MSSSKYYAAGEKIKKACSTCTCFGGEWRCDNIECKDIIKCPNNLVFSKNASTCPKTCGNKDHYRDCDMEAEGCKCP
NGTILDYNMRCVPEKECPCRHGGKVHNHLEKIKVRCNLCECNGGHWSCSSQKCDGVCISAGDPHYTTFDGLRFSY
QGNCKYVLSQTENQKFRVVAENVPCGTSGVTCTKNIFIQYQDLTINLMRGRNIEVNGVELANLEQGARVFGDVHI
MVAGLYHIVNSTDFLIKWDGATRLYIVVHSQWKGKLQGICGNFDM**DSSNDLI**TVSGILGSYQELVESWKVEESCTV
DSNPFIDESDPCHGHLHRKEWATKECSMINTPSADNPFTPCLAKLDSTDLIKSHIECLYDACSCDKGGDCECLCSSLA
AFSELCIKAGVPIKWRSLHKCPIQCEYGKEYLPCGPICQQTCMDLSTGNNPQCNDAGCVEGCFCPAGTVADYNGRC
IEPANCDCYLDNNRYPVGSQITKDCLLCECRNGSFDCSQNIADCKPKCDLKTEFTCPSDKTCIPKEWLCDKVNDCGD
NSDELNCKCDVTNKTFVCNNGQCIDKKYLCDGM**PNCRDGSDE**DNCKPTCSEFQCENNKCIPFSWTCDGYPDCGF
LDESDEMNCNKTSNCTDDVREFKCNKDSECLPITEKCDGHDDCGDGSDERHCRCICEKGFACKSSCECIDPKRVCDS
VRDCSDGSDEKGCSCAHDEYRCNGGKCINATLLCDGKKHCPNGDDESHPKCTTTTTTSTSTTTTTTTTGQPAVVTT
VTVISNQTSTSTETPAISSTTTTSQCSPELYQCKENPTVCINKTQLCDQTCDCGFNCLDESNCYSTTSGPCTTFLCDINS
GTTRKCLDPRRLCDGHQDCFDNTDEDPSRCFETTTTSTTVPPPNYYCDHGIEISNITTLNHTLMNGHELDGVTDEID
NFFSENKKLVVPSESFNGVRFDFFTQVHITRVLFNMVNKAFITVKIDNDVDLAIRKVNIDDTNSIIIAEMNPELVNEIS
TRSLTITIQAFDEDVKVSKLTIEGCYDYDYNGGAGTTTVTGYTRATRPTRQTTKITT
KTGSTTTPGECEETEIIGNPKYVSDIETTPFVFPADLIPNSGGIELKKLPAKIKVIVTTGIEIPIISIEFSNKKTNIKEYTIELID
RNGKTIYEDKENKLITKINSENPATEIIITILSTKDNQYPKFVELSIKACKHYDIHQTTTNVFTSFTTKEQYCEKELGLRNN
IISSDDIVLSSKKGNVNEIRLGYKKLWKAAKDDLLPSVKVFFNEPVELSGLKIRGTVDRIKIMYRTEDLENFEYIQSEDFK
RLPAELNGESTIKFPRVTDVKEVIVDFFVSFIGEPVTAQIELLGCGEIVDHTRITTKRPVCENRDILLVDEAVDLINNQA
DEEIDIHEIADNNQTGWKPTILSDYIDIKLMNAIDIVKIVVLPGSNVKKYKLVYKDINEVEKDTQKNEKSEPIVYYFPRD
VDLIKTIRFKPIKKFNPNQQYNIKLKIFGCIKSRNYTTKTKPTTKLSTISTTTETQECESQDILINPASIEEINNQKDEDIHF
EVISSHYPKHKGWKQQIKSDFVDLKLANALKIVKFEVVNGSNVKKYYLRMQDVNEKSHEYLKVEDSDFIVKKNIDLV
RVIRFKPLKKINKKQDYNIKFKIYACTTFKTHPEQSKTSTSTISTTTTTTTTTVSSATNKETSVYHTDVTSHGTTKTSHGT
TIASHGTTKTTHKTLYTTQKYCENNDVLLYPENVEEINNQEDEEVPLGQISDNNEIPGWVPHRRSDFVDIRLAHALRII
KLVVVNTSNVKNFIVKLQDVELKIHTLKGNGESELLIPTDLDYIKVIRFHPKIKPEQDLKSFHIKLKLIACTKPRTVPTKKT
TKKITTFTTKTKESCELYDVLSQLDNKNYEILSVNTIKPVKNIKKLEINSGEELRIKFEGIEKIVKIKVDKNSNIKSFFIKYVN
SKNDLINLEKYEDEIVYLPYIEMREIIITPLTKWKNNEKFKFDIDISGCKKGKQQRRKM

Uncharacterized *Euchlanis dilatata*-specific protein

rf 1 ctg.003923F.g152291.t1

MW: 284572

(Datki et al., 2023)

MDKEQPIFTITSSVPRDRRIEDIYPDSARPYDAPRGTNTVTFTFNLPELKTAEVGLVEILPGSNVDTVKVTTLRDTEPV
DEKETNDNQPIIGFIFTSINEIRITLTTDKPTLKDVRIRILVCLHIYTTTTSTTGEPASTTTVIVSSTTTPTTIITPVIITTRKTD
KPETTTTRPTGTTTKTSTTKPTGTTTKTSTTRPTGTTTTTRPTGTTTSTTRPTGTTTTTTTKPTGTTTTTTTTTKPTGTT
TTTSTTKPTGTTTTTTRTEPITTTRISTKHTHQTDGITTTTTNDEDTTTTLTEPTTTSTNEEETTTTTTTESTTTSTNEEDT
TTTTTEPTTTSTVTVPTTTTTTITPICTKTDGMDKEQPIFTITSSVPRDRRIEDIYPDSARPYDAPRGTNTVTFTFNLPELK
TAEVGLVEILPGSNVDTVKVTTLRDTEPVDEKETNDNQPIIGFTFTSINEIRITLTTDKPTLKDVRIRILVCLHIYTTTTSTT
GEPASTTTVIVSSTTTPTTTITPVIITTRKTDKPETTTTRTTGKTTSTTRPTGTTTKTSTTKPTGTTTKTSTTKPTGTTTKTS
TTRPTGTTTTTTRPTGTTTSTTRPTGTTTTTTTTKPTGTTTTTTTTKPTGTTTTTSTTKPTGTTTTTTRTEPITTTRISTKH
THQTDGITTTTTNDEDTTTTLTEPTTTSTNEEETTTTTTTESTTTSTNEEDTTTTTTEPTTTSTVTVPTTTTTITPICTKTD
GMDKEQPIFTITSSVPRDRRIEDIYPDSARPYDAPRGTNTVTFTFNLPELKTAEVGLVEILPGSNVDTVKVTTLRDTEP
VDEKETNDNQPIIGFIFTSINEIRITLTTDKPTLKDVRIRILVCLHIYTTTTSTTGEPASTTTVIVSSTTTPTTIITPVIITTRKT
DKPETTTTRTTGKTTSTTRPTGTTTKTSTTKPTGTTTKTSTTRPTGTTTTTTRPTGTTTSTTRPTGTTT
TTTTTKPTGTTTTTTTTKPTGTTTTTSTTKPTGTTTTTTRTEPITTTRISTKHTHQTDGITTTTTNDEDTTTTLTEPTTTST
NEEETTTTTTTESTTTSTNEEDTTTTTTEPTTTSTVTVPTTTTTITPICTKTDGMDKEQPIFTITSSVPRDRRIEDIYPDSA
RPYDAPRGTNTVTFTFNLPELKTAEVGLVEILPGSNVDTVKVTTLRDTEPVDEKETNDNQPIIGFTFTSINEIRITLTTD
KPTLKDVRIRILVCLHIYTTTTSTTGEPASTTTVIVSSTTTPTTTITPVIITTRKTDKPETTTTRTTGKTTSTTRPTGTTTKTS
TTKPTGTTTKTSTTKPTGTTTKTSTTRPTGTTTTSTTRPTGTTTTTTTKPTGTTTTTTTTKPTGTTTTTSTTKPTGTTTTT
TRTEPITTTRISTKHTHQTDGITTTTTNDEDTTTTTTEPTTTSTVTVPTTTTTITPICTKTDGMDKEQPIFTITSSVPRDR
RIEDIYPDSARPYDAPRGTNTVTFTFNLPELKTAEVGLVEILPGSNVDTVKVTTLRDTEPVDEKETNDNQPIIGFTFTSI
NEIRITLTTDKPTLKDVRIRILVCLHIYTTTTSTTGEPASTTTVIVSSTTTPTTTITPVIITTRKTDKPETTTTRTTGTTTSTTR
PTGTTTKTSTTRPTGTTTKTSTTRPTGTTTTTTRPTGTTTSTTRPTGTTTTTTTKPTGTTTTTTTTKPTGTTTTTSTTKP
TGTTTTTTRTEPITTTRISTKHTHQTDGITTTTTNDEDTTTTLTEPTTTSTNEEETTTTTTTESTTTSTNEEDTTTTTTEPT
TTSTVTVPTTTTTITPICTKTDGMDKEQPIFTITSSVPRDRRIEDIYPDSARPYDAPRGTNTVTFTFNLPELKTAEVGLVE
ILPGSNVDTVKVTTLRDTEPVDEKETNDNQPIIGFTFTSINEIRITLTTDKPTLKDVRIRILVCLHIYTTTTSTTGEPASTTT
VIVSSTTTPTTTITPVIITTRKTDKPETTTTRTTGKTTSTTRPTGTTTKTSTTKPTGTTTKTSTTRPTGTTT
TTTTRPTGTTTSTTRPTGTTTTTTTTKPTGTTTTTTTTKPTGTTTTTSTTKPTGTTTTTTRTEPITTTRISTISTTSHFCETF
EIMGNPIYITDIQTVPFIFPELLSPLSGGANFTKPSAEIVVLFTSGNEIPINSIQFSTFSNIKKFTVQIVSTDNSIIEFVTKQT
NEPVYVQSNKKISKIVINILSTTDSRNPSNVELSIKSCTHITLATKLTSAHPASTTTVIVSSTTKPTSTISPVITSSTSTLSQF
TTTHSCEMFEIMGNPMYISDIQTEPFIFPDLFVPSSGGANFSTPTSDLIVSFTLGNEVPLEIIEFSPLSNIKQFIIKLISND
NELIETVSKQKNEPVYVKTNKKISKIVINILSTTDNKYPQNVELSIKSCTHIELTTKPVSTTTFTYTTTTFENCIYSSWSQW
TSCSSECGHSTKSRNRYVISGICHGELHQSKDCDNVNCSCVFTAEVFVTLTRRQVPIDLVVGYIKKSPNSPVSSTDPAV
SIFDVVPFGTHIHVDNCSEIICDKNGLQIIHHNCSSIFFFRILFLYFILMLLIILKRIVPGLNGLHGQFVVQIVMHLVYNTE
LENQVRILLMYAMNLH

Suppl. Figure S1. Peptides derived from rotifer-specific proteins. The R-SSPO/1 (derived peptides: DSSNDL and PNCRDGSDE) and uncharacterized protein (derived peptide: STTRPTGTT) types of synthesized peptides are highlighted in color, while the theoretical but untested versions (TEDLENFEYIQSEDFK, CTKTLKMTF, RNIEVNGVE, and IPTDLDYIKV) are underlined.